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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,745	09/05/2003	Robert William Courtenay	95-0051.04	9069
7590	11/28/2005		EXAMINER	
Charles Brantley Micron Technology, Inc. MS 1-525 8000 S Federal Way Boise, ID 83716			JOLLEY, KIRSTEN	
			ART UNIT	PAPER NUMBER
			1762	
DATE MAILED: 11/28/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/656,745	COURTENAY, ROBERT WILLIAM	
	Examiner	Art Unit	
	Kirsten C. Jolley	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 10/24/05.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 17 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 9/5/03.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it should be updated to reflect the claimed invention. Correction is required. See MPEP § 608.01(b).
2. In the first paragraph of the specification, the status of parent application 10/155,450 should be updated to indicate that it has been patented as Patent No. 6,666,917.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In line 9, the phrase “defining said first point to be independent of a rotation of said surface” appears to be new matter. The Examiner was unable to find disclosure of this limitation in the specification.

In line 10, the phrase “moving said nozzle in no more than one direction along said diameter” also appears to be new matter. The specification does not disclose that the nozzle may be moved in no more than one direction along the diameter, and the exclusion of moving in more

than one direction in the claim results in a negative limitation. It has been held that negative limitations, which did not appear in the specification as-filed, introduce new concepts and violate the description requirement of 35 U.S.C. § 112. Ex parte Grasselli et al., 231 USPQ 393 (Bd Pat App & Int 1983): "It might be added that the express exclusion of certain elements implies the permissible inclusion of all other elements not so expressly excluded. This clearly illustrates that such negative limitations do, in fact, introduce new concepts."

In line 1, the phrase "*depositing a material at least partially along a diameter...*" also appears to be new matter [emphasis added]. In the embodiment of the specification where the nozzle moves from a first point along a circumference of the surface and stops at a second point along the circumference of the opposite edge (described at page 7, lines 8-10), it is disclosed that material is dispensed along the entire length of the diameter. There is no disclosure that the material may be deposited on only a portion of the diameter; such a limitation does not appear to have been envisaged at the time the invention was made. Therefore, the use of the phrase "*at least partially*" in line 1 introduces new matter.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 9, the phrase “defining said first point to be independent of a rotation of said surface” is vague and indefinite because it is confusing and it is not clear what is meant by this limitation.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim 17 is rejected under 35 U.S.C. 102(e) as being anticipated by Tomoeda et al. (US 5,626,913).

In the embodiment described at col. 14, line 48 to col. 15, line 13, and illustrated in Figures 18A to 18E, Tomoeda et al. discloses a method of depositing a material along a diameter of a surface having a first edge, a center, and a second opposite edge, comprising: providing a nozzle; positioning the nozzle generally over the first edge, over a first point along a circumference of the surface; moving the nozzle in no more than one direction along the diameter; spraying material from the nozzle while moving the nozzle; stopping motion of the nozzle after it passes over the center, over the second opposite edge, and over a second point along said circumference; and then rotating the surface.

While Tomoeda et al. also supplies material to points other than along the diameter (because material is applied over the entire substrate surface), Tomoeda et al. None-the-less

supplies material along the diameter as claimed. The claim's use of "comprising" language is broad and open claim language. The transitional term "comprising," which is synonymous with "including," "containing," or "characterized by," is inclusive or open-ended and does not exclude additional, unrecited elements or method steps. *Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986); *In re Baxter*, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); *Ex parte Davis*, 80 USPQ 448, 450 (Bd. App. 948).

Further, it is noted that "diameter" is defined as "a chord passing through the center of a figure or body" or "the length of a straight line through the center of an object" in Merriam-Webster's Collegiate Dictionary, Tenth Edition. Similarly, "circumference" is defined as "the external boundary of a figure or object." Therefore, claim 17 is not limited to a circular substrate.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Samuels (US 4,457,259).

Samuels discloses a method of depositing a material along a diameter of a surface having a first edge, a center, and a second opposite edge, comprising: rotating said surface; providing a

dispensing nozzle 21; positioning the nozzle generally over the first edge, over a first point along a circumference of the surface; moving the nozzle along the diameter; spraying material from the nozzle while moving the nozzle; stopping motion of the nozzle after it passes over the center, over the second opposite edge, and over a second point along said circumference; and then moving the nozzle back over the same path again while dispensing. Figure 2 illustrates that dispensing nozzle 21 moves along the diameter of the wafer surface 17.

Samuels teaches that the nozzle moves across the diameter of the substrate a plurality of times, instead of moving in no more than one direction along the diameter as claimed. However, it is the Examiner's position that it would have been obvious to one having ordinary skill in the art to have only moved the nozzle across the substrate one time while dispensing a larger amount of coating material, instead of moving the nozzle multiple times across the substrate while dispensing a lesser amount of coating material, with the expectation of similar and equivalent results, in the absence of a showing of criticality.

Response to Arguments

11. Applicant's arguments submitted with the application, based on the rejections provided in the parent application, have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hillman et al. (US 5,094,884) and Fukuda (US 4,564,280) are cited to demonstrate

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the conventionality in the art of dispensing material on a spinning substrate while traversing a nozzle from the peripheral edge to the center and back to the peripheral edge again.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C. Jolley whose telephone number is 571-272-1421. The examiner can normally be reached on Monday to Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Kirsten C Jolley
Primary Examiner
Art Unit 1762

kcj